Notice of Completeness **Application for Shipboard Technology Evaluation Program (STEP)**		
Documents Required	**Completed: Yes-No-NA**	**Explanation of Deficiency**
1.0 Letter of Commitment	☐ ☐ ☐	
2.0 Environmental Compliance	☐ ☐ ☐	
2.1 Conditioning of treated water prior to discharge, and assessment of discharge water	☐ ☐ ☐	
2.2 Management of treatment waste streams	☐ ☐ ☐	
2.3 Literature Search	☐ ☐ ☐	
2.4 Documentation	☐ ☐ ☐	
3.0 Documentation of prior experiments demonstrating efficacy of the Applicant's treatment system	☐ ☐ ☐	
3.1 Laboratory experiments (bench scale)	☐ ☐ ☐	
3.2 Shore side experiments (intermediate scale)	☐ ☐ ☐	
3.3 Onboard experiments (intermediate or full scale)	☐ ☐ ☐	
3.4 Data submission requirements	☐ ☐ ☐	

Notice of Completeness (page 2) Application for Shipboard Technology Evaluation Program (STEP)		
Documents Required	**Completed: Yes-No-NA**	**Explanation of Deficiency**
4.0 Study Plan	☐ ☐ ☐	
4.1 Format Requirements	☐ ☐ ☐	
4.2 Test Organization and Staff	☐ ☐ ☐	
4.2.1 Ship owner and operator	☐ ☐ ☐	
4.2.2 System vendor(s)	☐ ☐ ☐	
4.2.3 Test team and affiliations	☐ ☐ ☐	
4.2.3.1 Management	☐ ☐ ☐	
4.2.3.2 Technical staff	☐ ☐ ☐	
4.2.3.3 Laboratories	☐ ☐ ☐	
4.2.4 Testing Flow Chart	☐ ☐ ☐	
4.2.5 Public funding sources	☐ ☐ ☐	

Notice of Completeness (page 3) Application for Shipboard Technology Evaluation Program (STEP)		
Documents Required	**Completed: Yes-No-NA**	**Explanation of Deficiency**
4.3 Description of Vessel and Ballast Water Treatment System	☐ ☐ ☐	
4.3.1 Test Ship, Location, and Conditions	☐ ☐ ☐	
4.3.2 Treatment System Overview	☐ ☐ ☐	
4.3.3 Treatment Stages	☐ ☐ ☐	
4.3.3.1 *Stage #1*	☐ ☐ ☐	
4.3.3.2 *Stage #2*	☐ ☐ ☐	
4.3.3.3 *Stage #3*	☐ ☐ ☐	
4.3.4 Powering and other engineering matters	☐ ☐ ☐	
4.3.5 Controls and monitoring	☐ ☐ ☐	

Notice of Completeness (page 4) Application for Shipboard Technology Evaluation Program (STEP)		
Documents Required	**Completed: Yes-No-NA**	**Explanation of Deficiency**
4.4 Experimental Design and Protocols	☐ ☐ ☐	
4.4.1 General Description	☐ ☐ ☐	
4.4.2 Goals for treatment effectiveness by target taxa	☐ ☐ ☐	
4.4.2.1 Treatment effectiveness on target taxa	☐ ☐ ☐	
4.4.2.2 Comparison with ballast water exchange effectiveness	☐ ☐ ☐	
4.4.3 Experimental Design	☐ ☐ ☐	
4.4.3.1 Sample collection for each treatment and control.	☐ ☐ ☐	
4.4.3.2 Description of the number of test runs.	☐ ☐ ☐	
4.4.3.3 Range of operational and environmental conditions	☐ ☐ ☐	
4.4.3.4 Measurement of treatment system and ballast water exchange performance	☐ ☐ ☐	
4.4.3.5 Experimental comparison of treatment system to BWE	☐ ☐ ☐	
4.4.3.6 Reporting procedures.	☐ ☐ ☐	

Notice of Completeness (page 5) Application for Shipboard Technology Evaluation Program (STEP)		
Documents Required	**Completed: Yes-No-NA**	**Explanation of Deficiency**
4.4.4 Sample collection and analytical protocols, including standard operating procedures	☐ ☐ ☐	
4.4.4.1 Sample collection and handling	☐ ☐ ☐	
4.4.4.2 Laboratory/field measurement procedures	☐ ☐ ☐	
4.4.4.3 Sample archives	☐ ☐ ☐	
4.4.5 Quality assurance and control for sampling and analysis	☐ ☐ ☐	
4.4.6 Schedule and milestones	☐ ☐ ☐	
4.4.7 Review Panel observation of primary tests	☐ ☐ ☐	
4.4.8 Other measures of success	☐ ☐ ☐	

Notice of Completeness (page 6) Application for Shipboard Technology Evaluation Program (STEP)		
Documents Required	**Completed: Yes-No-NA**	**Explanation of Deficiency**
4.5 Engineering and Vessel Operations Matters	☐ ☐ ☐	
4.5.1 Treatment system configuration	☐ ☐ ☐	
4.5.1.1 Engineering Documentation Package	☐ ☐ ☐	
4.5.1.2 Mechanical Layout Drawings, PFDs, and P&IDs	☐ ☐ ☐	
4.5.2 Ship operations interface and crew labor impacts	☐ ☐ ☐	
4.5.3 Maintenance and reliability	☐ ☐ ☐	
4.5.4 Classification society approval	☐ ☐ ☐	
4.6 Human Health and Safety	☐ ☐ ☐	
4.6.1 Exposure to treatment system media	☐ ☐ ☐	
4.6.2 Safety impacts of treatment system	☐ ☐ ☐	
4.7 Long Term Treatment System Performance Monitoring	☐ ☐ ☐	
4.7.1 Treatment performance	☐ ☐ ☐	
4.7.2 Engineering performance	☐ ☐ ☐	
4.7.3 Reporting requirements	☐ ☐ ☐	